

ABSTRACT OF THE DISCLOSURE

A solid-state imaging device is provided, which is capable of increasing an S/N ratio while enhancing a dynamic range, when a photoelectric signal is converted into a digital signal. This solid-state imaging device comprises: a plurality of photoelectric conversion devices arrayed in rows and columns, each of the photoelectric conversion devices converting an optical signal into an electric signal and outputting a first signal voltage; a difference signal generation circuit provided for each column, for sequentially inputting the first signal voltage and a second signal voltage obtained by initializing the photoelectric conversion devices, thereafter converting the first signal voltage and the second signal voltage into charges, generating a difference signal therebetween, and then outputting the difference signal after adjusting a gain according to a level of the difference signal; and an analog/digital conversion circuit connected to the output of the difference signal generation circuit.

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